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Supervisory Management

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. . . is the first step in making your memos and reports more useful to higher management.

AMERICAN MANAGEMENT ASSOCIATION

"This I Believe..."

Tradition or Innovation?

By Frederick R. Kappel

President
American Telephone and Telegraph Company

TRADITION in an organization serves many important purposes. But unless progress becomes the prevailing habit, tradition will be misused. People will lean on past wisdom and experience to the point that they develop none of their own.

One test of leadership is to know the differences between a tradition that is still good, one that must be modified, and one that should be abandoned altogether.

We dare not ignore the methods and skills that have demonstrably paid off. But we must also recognize—and here is the challenge—that no matter how successful we have been, not all the methods we have learned will be useful for continuing success.

—from *Vitality in a Business Enterprise*
(McGraw-Hill Book Company, Inc.)

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To Get More Done

By John Perry

Vice President, Fred Rudge Associates

MANAGEMENT BY OBJECTIVE is an accepted way of business life for top executives. The principle is simple: If you know where you want to go, you improve your chances of getting there. Besides the direction, the size and distance of the goal are important: Running a mile calls for different tactics than a hundred-yard dash.

Why shouldn't every manager manage that way? There appears to be no sensible alternative; yet supervisors are often caught up in the pressures and crises of each day. They work through them, somehow, but each week brings more—many of them repetitions of previous problems. There seems to be no time to plan.

A critical look

After reading an article on this subject, Harold Reed, general foreman in a medium-size plastic plant, asked himself, "Just what have I accomplished in the past year?"

He made a list of everything he could call progress. It wasn't a bad showing: The new extruder had been mastered; his foremen had learned to use the new production-control system; their departmental budgets were in better shape; and there were other improvements, too. He'd earned his pay. But he wasn't satisfied; he knew there were some other important gains that could and should be made.

Now he began listing them. They included training needs, mechanical improvements, better housekeeping, more precise definition of machine capabilities, methods changes, standardizing procedures for cleaning machines, solving some materials-handling problems. His list covered five sheets of paper.

In reviewing these items, Reed saw with some discomfort that during the past year he had done something about almost every one of them, but not enough. In one case, he had a half-finished sketch in his desk drawer. He had held two meetings of his foremen to talk

.. Set Realistic Goals

about training. He'd talked with Engineering about an idea for mechanizing an unloading operation. But he had to admit that he'd only been nibbling at improvements.

It wasn't all his fault. Engineering, for example, had shown interest in the unloading idea, but its staff was working overtime on other projects. The training proposal had bogged down when Personnel became engrossed in union negotiations. Still, if he had organized his objectives and done some thoughtful planning, wouldn't more have been accomplished?

Setting the sights

Going over the list again, Reed concluded that it wasn't realistic to try to cover it all in one year. He decided to set objectives for the next 90 days, and then have another look.

What criteria could he use in selecting targets? Some of the items fell into natural sequences and it was easy to see where to begin. For example, if the unloading idea could be worked out, it would change the operation at the ends of three machines; then—not before—it would make sense to consider a conveyor to unclog that end of the floor. Since Engineering's help was needed for this project, and for several others, Reed decided to ask for a quota of Engineering man-hours for the 90-day period. Within the limits of that quota he could set priorities.

Selective list

"Electronic inspection" was one item on his list, a hope rather than an idea that some kind of automatic inspection could be devised. Regretfully, he struck it off as too speculative for the present.

"Train foremen in using the monthly cost reports" was also on the list. He considered that for a few minutes, then jotted down: "Train *one* foreman—." That much he could do in 90 days, and that man, once he was trained, could help train the others.

His ambitious plans for better machine management were narrowed down to one group of 12 overage light presses. Work load in this department had been declining gradually for years; there were seldom more than four machines in use at once, but it had seemed more convenient to minimize setups by keeping them all and moving workers from one to another.

Was this system efficient, though? Couldn't schedules be based on forecasts instead of actual orders? If so, longer runs could be planned and inventories managed better. Then four, perhaps six, machines could be moved off the floor, dismantled, and used for spare parts. That, in turn, would release floor space; and *that*—but this was a big enough bite for 90 days.

Of 35 items on his original list, Reed set aside 27 for the future, some because they were too ambitious for the present, others because the potential pay-out seemed too small in relation to effort, and a few because he'd need more help from top management than could be expected right now. He chose eight items: the unloader; training one foreman in cost controls; analyzing use of one machine group; getting a standard wash-up procedure on another group; getting an inventory on the number and condition of trucks and skids; and three others. He tacked the list of eight to his office wall and went to work.

Building a team

Seven of the eight projects were completed when the 90-day period ended, and the last was well on the way. Now, he decided, it was time to get his foremen involved. When they met with him, each received a set of charts that looked something like the one below (shown in condensed form):

First, he commended them for the achievements of recent months. Then he told them of his self-analysis, his goals, and the results. He asked each of them to go through the same process, taking time to set their goals thoughtfully and realistically.

In these areas:	What do you plan to accomplish?	What help will you need?
Training Men		
Job Methods		
Department Manning		
Condition of Machines		
Housekeeping		
Cost Reduction		
Quality Control		
Self-development		
Other:		

"Then come see me," he said. "I'll set aside a couple of hours for each of you, two weeks from now. Keep an eye on that third column: 'What help will you need?' My guess is that some of you have a backlog of projects you could move on with some technical help. Maybe I can get it for you."

Reed wasn't sure that he'd gone about it the right way: Perhaps he should have given them copies of his own goal-sheet to use as a model, or shown them case-by-case how goals were evolved. But this would have invited imitation. Left to their own, some of the foremen might devise even better ways.

Overambitious lists

Two of them needed help right away. Not waiting for their scheduled appointments, they came to Reed soon after the first meeting. One had bogged down in details, writing several pages on "Training" before stumbling to a halt. The other had listed what looked like New Year's resolutions ("I will keep my department cleaner"), but had realized afterward that that wasn't what Reed meant.

After talking with them, Reed strolled through the plant chatting with the others. He soon found that the listing of "areas" was helpful in promoting orderly review, but it made some foremen feel they should find at least one goal for each category, as if they were all equally important. There was no lack of substance in their drafts; the common difficulty was in defining the goals precisely.

When the foremen came in for their individual conferences, Reed was more than pleased with what they had done. True, the results were far from uniform; some had overestimated what could be done, some had held back. One man voiced a question Reed suspected all had in mind: "What are the others planning?"

It was a natural question, and there was no reason that operating goals should be confidential. Yet some men *had* defined their goals more realistically than others and Reed did not want to embarrass anyone by seeming to make comparisons. He thought of a better way:

"Why don't all of you get together for a review, without me? You might get some ideas from each other."

Group pow-wow

The foremen did get together, in a meeting that lasted well after closing time. Reed never knew exactly what went on, but everyone seemed pleased, and the lists that finally came to him were distinct improvements over the early drafts. Items like these were typical of their revised lists:

- Check out each operator on at least two machines.
- Train catchers to help on jams.

- Develop a lead man on the night side.
- Combine Inspection with Rewind.
- Get one man out of the Coating crew.
- Arrange for inspection of dies when they come off; all dies in racks to be ready for use.
- Get butt cans up off the floor.
- Reduce number of split runs by getting copies of initial orders.
- Develop automatic cutoff to reduce trim.

One effect of the meeting had been to put certain objectives on all the lists. For example, cigarette-butt cans had been a housekeeping problem everywhere: Left on the floor, they were often knocked over, kicked aside, or mashed, and they were usually surrounded by litter. One man's objective—to get them off the floor, mounted on uprights or machine frames—had been adopted by all.

Wall check list

Now what? Reed tacked the foremen's goal-sheets on the wall beside his own. As days went by, progress was evident. Successes were reported quickly. Help was often sought and usually obtained. The principal goals became agenda items at his weekly foremen meetings.

Ninety days later, the time seemed ripe for a review. Allowing for duplications and overlaps, his nine foremen had originally listed 43 objectives. Subsequently two or three of them had to be scrapped when process changes were announced, and three others deferred until more was known about the new processes.

Practical whittling

In two cases, both potentially important, no progress had been made other than discovering that they'd take more time and effort than anticipated. Reed shocked the group by proposing: "Let's drop them for this year!" But the men got the idea quickly: Goal-setting should be limited to the attainable.

There was no thought of dropping ten more, which, although incomplete, were showing progress. The butt-can project, for example, had been delayed simply because one good idea was topped by another. The men wanted a can that could be mounted easily, that could be emptied easily, that would offer a good target to a flipped butt, and that would quench it!

What pleased everyone, including Reed, was the record of 25 objectives attained. Some of the changes, such as combining Inspection with Rewind, had been made quickly and successfully, once someone tried. And the catchers had been more than ready to be trained to help when machines jammed; indeed, it turned out that most of them knew how, but they'd never been asked to help. They were pleased to get into the act.

Total progress had been more rapid than expected. Indeed, it now seemed that most of the goals could be achieved much sooner than expected. The foremen acknowledged that they were spending more time now on improvement of operations; yet none of them thought daily operations were suffering. They were ready to take on more; already they had some new suggestions.

At the end of a year, Reed produced another innovation: his own annual report. In parallel columns he listed the goals he and his foremen had set during the past year and the results achieved. Then he listed the new goals, those they had set for the year to come. The report was signed by Reed and all of his foremen.

He sent a copy to his boss, the Manufacturing Manager, who promptly had more copies made for circulation in the front office. It was an impressive record. ♦

What Is GNP?

MOST ECONOMIC FORECASTS use the Gross National Product, or GNP, as a major yardstick—without ever saying what it's made of. Although its full definition would require a long essay, here is a shorter description offered by *The Biddle Survey:*

You can break down GNP into four main ingredients: 1) What the population spends for goods and services; 2) the total of private domestic investment; 3) net exports of goods and services; and 4) the total spent by government for goods and services.

The first ingredient, called "personal consumption expenditures," goes into GNP as the total market value of all services and goods bought by individuals and nonprofit institutions; but it also includes whatever a worker may get *as income* in the form of food, clothes, housing, or other compensation. Lately it has run close to $330 billion.

The second ingredient, private domestic investment, includes all new private construction, which covers dwellings, factories, and even oil wells; it includes new machines and equipment bought by business; and it includes the *change* in the physical volume of business inventories valued at average prices of the period.

The third item—net exports of goods and services—is self-explanatory. The final ingredient is the total paid by all city, state, and federal governments for salaries and wages—for firemen, teachers, police, governor of the state, and the mailman who brings your tax bill. Also counted are the huge sums spent by these governments for supplies, heat and light, window washing, Cape Canaveral rockets, and other military and defense costs.

Thinking through a writing problem

By William M. Schutte

Professor of English, Lawrence College

and

Erwin R. Steinberg

Professor of English, Carnegie Institute of Technology

DO YOU ENJOY the writing you occasionally have to do on your job? If you're like most managers, the answer is emphatically "No!" To the busy supervisor, any report—whether in set form, in a letter, or in a memo—is likely to seem an unnecessary nuisance, interfering with the "real work" he should be attending to. As he sees it, he must, more or less painfully, set down information on what for him is usually a dead issue for the benefit of someone who may do little more than file and forget it.

But the supervisor is mistaken if he believes that what he writes is filed unread or that it is of no importance. No doubt there is some unnecessary reporting in business and industry today, but most reports *are* read and *are* used, though the men who write them may not always see *how* they are used.

A report may be filed away after it is read and no action may be taken on it, but it has made a contribution to management's total picture of the company's operations. The recurrence of certain situations

or certain suggestions in a number of reports may lead to significant changes in operations or policy. And it is always possible that a single report may play a key role in bringing about such changes.

Furthermore, a supervisor's effectiveness may be judged to a greater degree than he realizes by his memos and reports. In many instances the men who make the final decisions about his future seldom see him; their impression of him and of his work must, therefore, depend very largely on the quality of what he writes.

Since his reports really are important, the supervisor owes it to himself and to his company to make them as good as he can. But what is a "good" report? We have asked this question of many executives. We have received hundreds of different answers, but they all boil down to one deceptively simple requirement: A good report must be as useful as possible to the person or persons to whom it is submitted. Then comes the question, what do we mean by "useful"? To find the answer it may be helpful to look at a specific example.

A sample report

The sample report on page 11 is a type most supervisors are required to submit from time to time—an accident report. Such reports, of course, are sometimes made on forms which require little more than filling in blanks. Many companies, however, require a special account of each accident and leave the form up to the supervisor. As you read the following report, put yourself in the place of T. C. Melton, Manager of Manufacturing of the Large Apparatus Division of the Farrell Corporation, to whom it is addressed, and also in the places of those who got copies. (The report is genuine, but the names have been altered.)

On reading this report, one might at first be inclined to call it "average" in effectiveness: Facts are presented, the action taken is recorded, and the writing seems to be clear. But how useful will this report really be to Mr. Melton and to those who get copies of it? For them it presents two difficulties: It is vague on a number of details, and so loosely organized that it is difficult to use.

Vagueness

If Tom Vogel, the foreman, had thought more carefully about the needs of his readers, he would have realized what they would want to know: how the accident occurred; why it occurred; its effects on the department; why the company safety program did not prevent it; and what has been done to avoid recurrence. This is the information that Vogel's superiors need if they are to take appropriate local action, or, better still in this instance, to take no local action because they are convinced by the report that everything has been taken care of.

But on a number of the matters in which they are most interested, Tom Vogel's report is vague. He suggests three possible causes for the accident but seems to have made no real effort to discover which was the true one. By a simple examination of the suspect bolt after the accident he should have been able to determine whether or not it was too worn for the nut to be properly tightened. He says that "corrections have been made on the lifting device" to prevent further accidents, but he does not indicate what the corrections were. He says that the safety check points were reviewed frequently with McManus, but there is no indication of what "frequently" means. The whole discussion of the safety shoes is muddled. Finally, he reports that McManus will be unable to work "for some time."

Unanswered questions

In short, where his supervisors need specific details Vogel gives only vague indications. To them it is important to know whether McManus will be out for three weeks or three months. It is also important for them to know exactly why the accident occurred and what specific steps have been taken to prevent similar accidents. But they do not get this information from Vogel (and they must conclude that Vogel himself does not have it).

The difficulties in reading Vogel's report are further increased by the confused way in which he presents his information. The report is not carefully put together. To be sure, there is order of a sort: He begins with the accident, says something about the background of the victim, then gives details about the accident and what was done for McManus, talks about the safety check points and the safety shoes, and concludes with brief notations of what has been done and will be done to prevent recurrence.

Importance of organization

The order of presentation is what might be expected if Vogel were reporting orally on the incident. In this respect it is similar to thousands of memoranda and reports made every day in business and industry. It meanders and fails to focus the reader's attention on what is significant to him. Thus, even if specific detail replaced the vague statement pointed out above, the result would still not be a good report, because it would still be badly organized.

If, before he started to write, he had thought carefully about what his superiors needed he would have realized: that they would want all of the data on one aspect of the case in one section; that they would want the sections arranged in a useful order; and that they would want each section clearly labeled so they could immediately find what they were particularly interested in. Each reader has a special interest in the case: the Safety Director in the cause of the accident and the actions

FARRELL CORPORATION

South Chicago Works
Large Apparatus Division

Metal Stampings Department
Oct. 16, 1961
Lost Time Accident
Paul McManus, MS-162-35

TO: T. C. Melton, Mgr. of Mfg.

cc: C. S. Stevenson, Asst. Mgr. of Mfg., St. Louis
M. Rosoff, Plant Manager
T. N. Smith, Director, Safety Department, St. Louis
N. W. McGuire, Mgr. Metal Stampings
L. C. Martin, Plant Safety Director
C. S. Maser, Section Manager

Paul McManus, MS-162-35, was involved in a material handling accident while drilling lever boxes. The accident occurred on Monday, Oct. 16, 1961, at 8:45 A.M.

This employee is 41 years of age. Prior to coming to this department he worked for 18 months in Section C-5 as a hooker-on; he is a qualified hooker-on and crane operator in metal stampings. He has been drilling lever boxes for more than three years, and is familiar with the operations involved in lifting and machining.

On Oct. 16, 1961, the employee was lifting a lever box into a drill fixture by means of a jib crane and hoist. The lever box fell from the lifting device while being raised from the floor and fell and struck the employee's right foot. The nut on the eye bolt may have prevented the lifting device from seating properly, or the employee may not have had the device tightened, or the device may have slipped because the bolt was worn, preventing complete tightening.

The employee was helped by other employees to the Department Aid Station where he received first aid. He was then sent to the Works Medical Office for further treatment. He was examined and treated by Dr. Grant. X-rays disclosed that the second, third, fourth and fifth metatarsal bones of the right foot were fractured. The employee was then taken by ambulance to St. Thomas Hospital. The writer was informed that this employee will be unable to work for some time.

The safety check points are reviewed frequently with this employee due to the fact that he is a section union steward and all the conditions in the area are reviewed with him periodically. At the last review the condition of this employee's safety shoes was discussed with him, and it was pointed out to the employee that he had delayed too long in replacing his badly worn safety shoes. New safety shoes had been ordered, but at the time of the accident, the employee had not received them and was not wearing safety shoes. It is recommended that in the future when an employee needs new safety shoes, goggles, asbestos gloves, etc., a colored slip be put in his pay envelope reminding him to secure the equipment required.

Corrections have been made on the lifting device to prevent recurrence of this type of accident.

Upon this man's return to work, a thorough review of the safety check points will be made in order to prevent a similar occurrence.

T. Vogel, Foreman

REVISED REPORT

On Monday, Oct. 16, 1961, at 8:45 A.M., Paul McManus, MS-162-35, suffered fractures of the second, third, fourth, and fifth metatarsal bones when a lever box fell on his right foot. His drill press (#3) was idle for the rest of the shift (7½ hours). The employee was not wearing safety shoes. He will be unable to work for approximately six weeks.

Description of Accident: The employee was using a job crane and hoist to lift a lever box into a drill fixture. When it was about three feet off the floor, the lever box fell out of the fixture, striking the employee's right foot.

Cause of Accident: The employee stated that he had tightened the nut on the lifting device before attempting to lift the lever box. However, Mr. Maser and I agree that the accident could not have occurred if the nut had been properly tightened. An examination revealed that the eye bolt was so worn that it was impossible to tighten the device completely.

Action Taken: McManus was taken by other employees to the Department Aid Station, where he received first aid. He was then sent to the Works Medical Office, where he was examined by Dr. Grant and X-rays were made. Then he was taken by ambulance to St. Thomas Hospital.

Employee's Experience: Paul McManus, 41, is a qualified hooker-on and crane operator. Before coming to Metal Stampings he worked for 18 months in Section C-5 as a hooker-on. He has been drilling lever boxes in this department for more than three years. Thus he is thoroughly familiar with all operations involved in lifting and machining.

Safety Check Record: Because this employee is a Section Union Steward, the safety check points in the area are reviewed with him once a week. On Oct. 2 I discussed with him the badly-worn condition of his safety shoes. On Oct. 6 I mentioned them again and urged him to order a new pair. On Oct. 12 he was not wearing safety shoes but reported that he had ordered a replacement pair on Oct. 11. If the employee had been wearing good safety shoes, the effect of the accident would have been minimized.

Steps to Prevent Future Accidents:

1. Both the eye bolt and the nut have been replaced.

2. This morning Mr. Maser and I discussed this accident and methods of preventing future accidents of this type with all hookers-on and crane operators in the department. In the future bolts will be inspected for wear twice each week.

3. When McManus returns to work, I will review with him all of the safety check points and stress the importance of preventing a similar occurrence.

Recommendation: I recommend that when an employee needs to replace a piece of safety equipment (such as safety shoes, goggles, or asbestos gloves) a reminder printed on a colored slip of paper be inserted in his pay envelope. The necessary information can be furnished to the Payroll Section by the man's foreman or section manager. The employee will then have no excuse for failure to secure the proper safety equipment.

T. Vogel, Foreman

taken before and after it occurred; the Department Head in the cause of the accident and the amount of lost time involved; the Manager of Manufacturing in the effect of accidents of this type on manufacturing operations, and in the recommendation of notices in pay envelopes.

If Tom Vogel had thought of the uses to which his report would be put, he might have written it differently, perhaps as shown on the opposite page.

An improved report

In its revised form, Vogel's report differs in several significant ways from the original, and each change makes it more useful to management.

It begins with a brief notation of the facts most important to his superiors: what happened, how it happened, the time lost as a result, and an indication that McManus was not properly protected. With this information in hand, some of Vogel's superiors—all busy men—may need to read no further. Others may wish to read only this paragraph and other sections of special interest to them.

The revised report also makes it easy for Melton (or Smith or McGuire) to find the material in which he is most interested. Not only has all of the material on one aspect of the case been gathered into one paragraph, but it has been given an appropriate heading. Thus the superior who is interested in how and why this accident occurred may read carefully the sections titled "Description of Accident," "Cause of Accident," and "Employee's Experience" and skim the rest. On the other hand, the man who is concerned about prevention of future accidents will read most carefully the sections on "Safety Check Record," "Steps to Prevent Future Accidents," and "Recommendation." The longer and more complicated the report, the more important this kind of organizing and labeling.

In the original, the foreman's recommendation—a very important part of the report—was buried in the middle, as was the statement that McManus was expected to be out "for some time." Chances are that Melton, who receives a great many reports each day, would not even have seen the recommendation as he skimmed over Vogel's original report. In the revision, it has been pulled out of the paragraph, placed in a key spot, and carefully labeled so that it cannot be overlooked. And a specific statement about McManus' expected absence has been placed in the opening paragraph.

Concrete data

Finally, in the revision vagueness is replaced by specific information. In addition to the length of McManus' time out, the down time on the drill press has been added. And the readers of the report know, so far as Vogel can tell them, why the accident occurred; what specific

correction has been made; how often the safety check points were discussed with McManus; and exactly what action Vogel has taken about the safety shoes.

Effect of a poor report

So far we have talked only about what the original report fails to provide for Tom Vogel's superiors. We have not mentioned what it does provide: an impression of Vogel. As they read through his report, they do not feel that they are listening to a competent foreman, a man who has every aspect of his job under firm control. Why, they may ask themselves, is he so vague, possibly even evasive? Is he trying to cover up for McManus? Or for himself? Or is he simply an ineffectual supervisor who doesn't really know what goes on in his own group and is too lazy to get his facts straight? Certainly the vagueness of detail and the awkward, disorganized way in which the report is put together do nothing to recommend Vogel's abilities to management as being orderly and incisive.

What to do about it

One of the chief reasons writing is such a chore to some supervisors and executives is that they do not have any clearly defined approach to a writing problem. Like Tom Vogel, they simply take a deep breath, plunge in, and hope that their report turns out well.

Vogel would certainly have written a better report if he had planned it first. There are two important and distinct preliminaries to any writing job: determining what to say, and determining how to say it. In two or three minutes Vogel might have jotted down key words or phrases to represent each of the details relevant to the report he was to write. He could then look them over quickly and decide whether they were specific and complete enough to meet his superiors' needs. If not, he would get additional information. With all his material assembled, he would have turned to the second phase of the problem: the most useful way to present it. He would have thought out the organization of the material and a method of highlighting key points.*

If Tom Vogel had taken a few minutes to plan his report this way, he would not have found the actual writing difficult. Having selected and evaluated his information and having determined his method of presentation, he could have concentrated on the phrasing of his sentences.

The final step in the preparation of a report, memo, or letter is reading it over. Again, the needs of the readers should always be kept in

*A more detailed discussion of planning will be found in Chap. 11 of the authors' *Communication in Business and Industry*, Holt, Rinehart & Winston, Inc., New York, 1960.

mind. If Vogel had taken a few moments to think about who would read what he wrote and why, he would not have submitted the report that he did.

Time-saving, too

But isn't all this planning and checking going to take more of Vogel's time than it's worth? Even if it did take more time, the increased value of his report to management and its effect on his own future would make it worthwhile. Actually, though, we have found that once a person begins to plan his writing he is able to turn out reports much faster than when he was trying to do everything at once—when he wasted time chewing his pencil and revising what he had written. If a supervisor thinks through a writing problem, he will not only do a better job but will also save time.

On the basis of one routine accident report Tom Vogel probably won't be convicted of incompetence. But the report does attach to the name "Vogel" an impression of incompetence which will be filed away in the minds of its readers, particularly those who do not see his work on the floor with his men. And if this impression is reinforced by other such reports from him, when opportunities for additional responsibility and advancement come along Tom Vogel's chances may be seriously affected by his "report" performance.

On the other hand, the man who writes effective reports, giving members of management the details they need in a useful form, impresses his superiors and opens up opportunities for himself. Thus his reports help him as they help the company. ◆

to improve job performance:

HELP THEM CAPITALIZE on their STRONG POINTS

by Marion S. Kellogg

Manager, Individual Development Methods Service
General Electric Company

WANTING TO DEVELOP your subordinates is an admirable goal. Doing something about it is even more admirable. But congratulations are not in order yet; there's still the pay-off question: Are the time and effort you spend on developing subordinates really improving their job performance and their capabilities?

The answer is a vital one. Far from being an extra frill, employee development is at the core of the supervisor's job. The efficiency of his department depends largely on how close his subordinates come to fulfilling their job potentials.

When employee development doesn't develop, it may be because the supervisor is misdirecting his efforts. Here are three approaches that can help him zero in on the target: better job performance.

1. Concentrate on the employee's strengths, not his weaknesses. Correcting weaknesses seems like a logical way to develop an employee; yet often it's a waste of time. We might take a tip from the Hollywood producer who is trying to turn an actress into a star. First, he carefully appraises her assets and her shortcomings. He usually finds she has weaknesses of two kinds. Some, like poor diction, can be remedied through training. But others are unalterable, and instead of trying to correct them, he minimizes them and concentrates on exploiting her good

points. If her left profile is poor, he uses camera angles that focus on her right profile. If she gets seasick in a rowboat, he uses a double for those scenes.

The same principle can be applied to developing an employee. Perhaps there are some things he doesn't do well because he lacks experience, training, or interest. These deficiencies can be remedied. But there are other things he doesn't do well simply because he has no talent for them.

Instead of hammering at these weaknesses, the supervisor will get better performance if he concentrates on identifying, promoting, and building the employee's strengths. If there's a problem area in an employee's performance, encourage him to find ways of improving it by utilizing his strong points.

Here's an example of just such a case: A bright, hard-working employee was an excellent organizer who worked well with people. But he was a complete flop with any assignment that required careful, methodical detail work. Every year he went over this shortcoming with his supervisor. Together, they worked out increasingly complicated schemes to overcome it. Finally, he agreed to keep track of his time almost hour by hour, making a daily, weekly, monthly, and quarterly report of progress in overcoming his weakness. But there was no progress to report. The supervisor realized that the plan for overcoming the employee's inability to do detail work required exactly that kind of work—which he couldn't do.

The supervisor then decided to attack the problem through the employee's strength—his ability to work with people. The element in his job that required detail work was keeping a personnel record system. Encouraged by his supervisor, he worked out a plan with other employees so that they would do all the detail work necessary.

2. Tie development closely to the employee's daily activities. At General Electric, managers get together once a year with each of their subordinates to draw up a program of personal development for the year ahead. Some are elaborate, some are simple, but most of them have the subordinate doing something *outside* of his regular job: taking a course, serving on a task force, attending professional meetings. These plans are also filled with good resolutions, such as, "Remember not to lose my temper," or "Plan farther ahead."

There is nothing wrong with constructive outside activities and good resolutions, and they may produce results. But it's more likely that they'll be lost and forgotten under the pressure of the employee's daily work. Since these daily activities absorb most of his attention and energy, here is where you should look for ways in which he can develop.

How to go about it? For a clue, review your own career for a mo-

ment. You probably learned and grew most from doing your work, but your development was not even and continuous. When you started a new job or ran into a fresh problem, you were stimulated to grow rapidly. Then, as you got on top of your job and much of it became routine, the growth curve flattened out. Perhaps you began to feel a little stale.

Clearly, then, the introduction of new situations and new challenges into a subordinate's job will stimulate his development. Of course, employees cannot always be doing something new; most of their work will have to be familiar. But a new element can be introduced at appropriate intervals—a higher goal, a new task, a new way of doing an old task.

Newness in itself is not enough, however. The new element in the job must perform two functions: It should be something useful to the department and it should make greater demands on the employee's capabilities, so that he will have to increase his knowledge and skills in order to accomplish it.

Here's how one supervisor gave a subordinate a new task that filled both these requirements: The employee was a promising young mechanical engineer, but he had only a skimpy knowledge of materials. His supervisor asked him to make a materials study of the product he was working on. This assignment required him to learn more about materials and also to reduce the product's cost by finding a less expensive material.

3. Give the employee positive feedback on his performance. Many supervisors spend plenty of time letting their employees know how they're doing, and the result is—nothing. There's no improvement in job performance, and in some cases the "frank" talk creates resentment.

A common cause of this failure is negative feedback. At General Electric, this point is brought home to managers in a "hide-and-seek" game. A group of 15 or 20 managers sit around a large table. One man is sent out of the room. The rest then hide a small object—let's say a cigarette lighter. They are instructed to help the man find the lighter, but only with negative comments. When he returns, he is told, "You're too far away." "You're too high." "You're on the wrong side of the room."

After he has found the lighter, the whole game is repeated, but this time he is given only positive feedback: "Go farther to the right." "Higher." "You're very close to it."

The result of this game seldom varies. With positive feedback, the seeker finds the object in about half the time that it takes him when he gets only negative hints. And far fewer instructions are needed.

Yet, a supervisor's appraisal of his subordinate often is put in negative terms—a list of things he *failed* to do. "You leave things to the last

minute," is a typical remark. The supervisor could just as easily say, "If you make a day-to-day plan and stick to it, you'll find you won't have a last-minute rush."

A variation of the "hide-and-seek" game demonstrates another useful principle for informing employees about their performance. In this game, instructions given to the seeker refer to what he was doing some time *before* his last move. For example: "When you first came in the door, you went in the wrong direction." If he can't remember in what direction he went, these instructions will confuse rather than help him.

Do it now

In the same way, if a supervisor saves up his comments for weeks or months, neither he nor the employee will be able to recall clearly what happened and why. To be most effective, comments on an employee's performance should be given as soon as possible after the specific action.

A second variation of the "hide-and-seek" game exposes the futility of another common appraisal technique: making comments based on the employee's personality. The man looking for the lighter will be told: "You aren't being aggressive enough in your hunt." "You need to show more creativity in finding the lighter." At one such session the seeker finally burst out, "When are you going to quit kidding around and give me some real help the way you did the others?"

Avoid personalities

Most subordinates will justifiably react the same way when they are appraised in terms of their personality defects. They'll be more receptive to constructive, specific suggestions on their *work* than to comments on their personal characteristics. A carefully worked-out plan based on these suggestions will help the employee convert them into improved job performance.

Putting these three employee-development principles into effect calls for thought and patience. But they can go a long way toward making your subordinates more effective on their present jobs and developing their potentialities for promotion. ♦

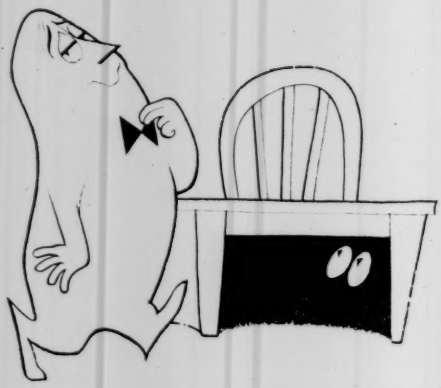
THE "PRACTICAL" MAN is one who continues to practice the same sins of omission as his predecessors. He allows himself to be lulled by the myriad interruptions of the work day, by false rewards of the same accomplishments repeated or those already past, by the soft comfort of a high production or sales volume—and loses the economic game to his competitors.

—JOHN D. STALEY
in *The Cost-Minded Manager*
(© 1961, by the American Management Association)

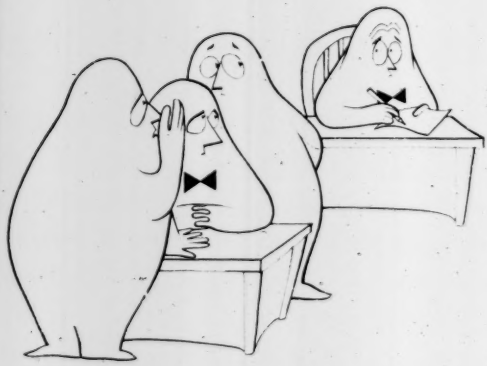
The Helping Hand

GUIDE FOR THE SELF-STYLED PSYCHIATRIST

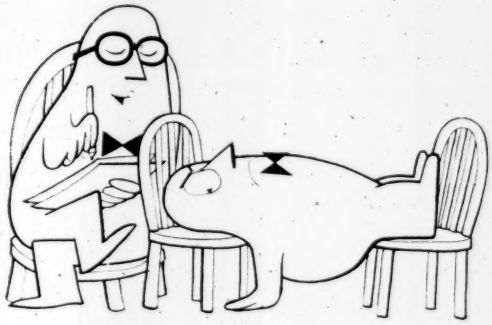
Everyone has problems, and every organization is bound to have some people whose worries, tensions, or emotional disturbances are serious enough to affect their work. Here are some tested methods by which a manager can insure that he will have more than his share of "problem employees"—and that their problems won't be little ones . . .



Ignore the Problem. Never mind how much his problem may disrupt the work of the department; if you ignore it, maybe it will go away.

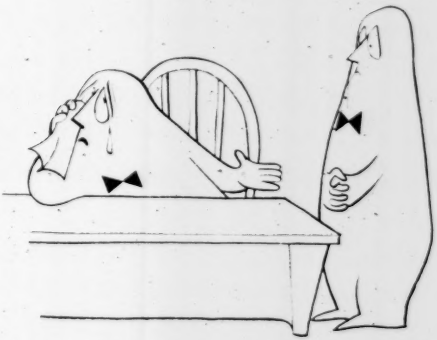


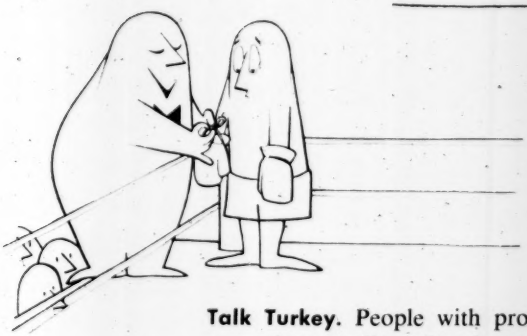
Get Advice from His Fellow Workers. You can never tell when you'll learn something worthwhile; at least, you'll certainly stir up interest.



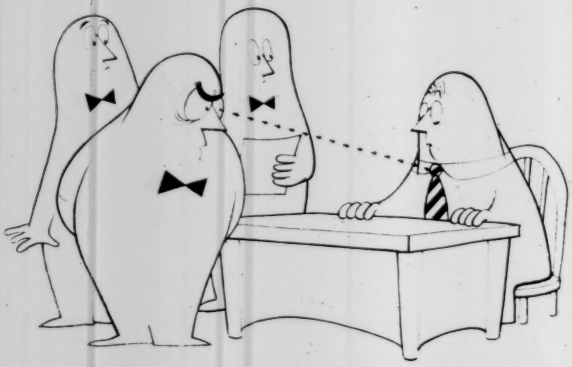
Play Psychoanalyst. With all the TV shows and movies we've had about emotional disturbances, surely you must be qualified to delve into your subordinates' psyches. You're certain to find problems if you pick and probe long enough.

Tell Him Your Own Problems. He doesn't know what real trouble is until you've poured out your tale of woe, so pull out all the stops.

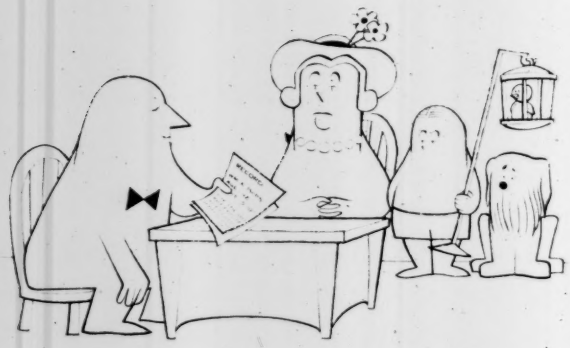




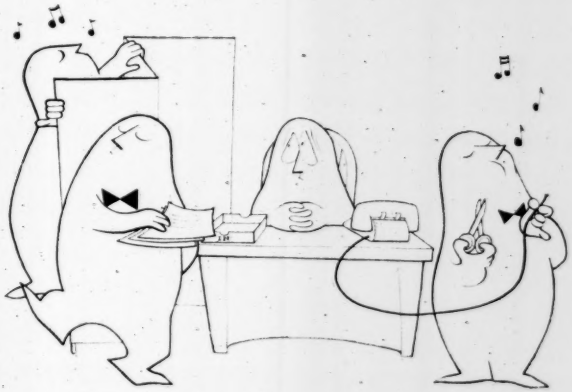
Talk Turkey. People with problems are weaklings! If a good pep talk and a hearty old slap on the back won't get him straightened out, nothing will.



Judge Him by Your Standards. If he doesn't act and think exactly as you do, there's obviously something wrong with him.



Call in His Family . . . and have a good heart-to-heart talk with them. His wife will appreciate knowing that he has a Big Brother in the office.



Isolate Him. At the first sign of trouble, quietly remove all his responsibilities until he gets a grip on himself—or has a nervous breakdown wondering what's going on.

Experiment. If you have any pet theories on the causes and cures of mental disturbances, here's your chance to try them out. Phrenology, anyone?

■ *Text by* R. F. GUDER
■ *Drawings by* AL HORMEL

OFFICE WORK:

is there an easier way?

by Irene Place

Associate Professor, School of Business Administration
University of Michigan

. . . the most potent weapon in the attack against waste motion is the word "why?"

THERE'S MORE CLERICAL work than ever—and despite electronic data-processing, most of it is still done by people. During the next decade, we'll need more office workers to handle the rising volume of written records, but present trends indicate that this need will not be met. More and more young people are going to college; they do not regard clerical work as a desirable occupation. High schools—a traditional training ground for clerical employees—are cutting back on office-skills courses and emphasizing math, science, and social studies.

How can the shortage of clerical workers be met? Part of the answer is a vigorous application of work-simplification techniques to increase office productivity without adding more workers.

Work simplification is an organized attack on waste motion in the office. Its most potent weapon is the word, "Why?" Here are three examples of wasted effort uncovered by asking this simple question.

Every day for three years a clerk carefully sorted all copies of memos she received—about 120 a day. When they were sorted according to serial number, she put them into a desk drawer. When the drawer was full, she bundled them up and put them in a storeroom. One day her supervisor asked her why she did this. Her answer: Her predecessor had told her to do it. It had never occurred to her to wonder if any-

body ever used these copies. It turned out, of course, that nobody did.

In another office, three employees spent time each month compiling data into a monthly report. About 50 copies were duplicated and distributed around the company. It wasn't until someone asked, "Why?" that the dismaying facts came out: The executive who started the report had left the company eight years before. Nobody else used it.

A department head spent several hours each week signing purchase forms for authorization. Then he acquired a new assistant, who saw his job with a fresh eye. "Why," she asked, "do you sign these at all? Why not give unit supervisors responsibility for purchases up to $200?" As a result of her suggestion, the department head freed several hours a week for more important tasks.

More per person

In attacking this kind of waste, work simplification aims at increased productivity—more output per individual employee. Labor-saving machinery is not the only way to achieve this goal. Productivity can also be increased by redesigning procedures to eliminate the nonessential and improve ways of doing the essential.

The tools need not be glamourous. A simple change to snap-out forms can save hours previously needed to interleave forms with carbons. Here are some other simple ways to make forms time-savers instead of time-wasters*;

- Using color to identify copies facilitates handling.
- Designing forms to align with the machines in which they're used, such as a typewriter, saves positioning time.
- Designing invoices and stationery to take a minimum of folding for an envelope makes folding time shorter.
- Using a postage meter saves stamp-affixing time.
- Vouchers preprinted with the number of the month (starting each month's supply with No. 1) save filing time.

Program planning

Improvements like these can be multiplied through a coordinated, office-wide attack on inefficiency. To be successful, a work-simplification program should include these elements:

- The program should be planned and run by a competent, enthusiastic, and informed leader who is receptive to others' ideas.
- Before the program is actually launched, it should be reviewed by higher management and by representatives of the groups that will be responsible for its implementation and results. Every opportunity

*For more tips on improving forms, see "How to Design a Form" in next month's SM.

should be provided for employee participation in this phase.

- Both short- and long-term goals should be set, after their feasibility has been established. Budget, personnel, and physical requirements should get careful study.
- A logical schedule should be worked out, including clear assignments of responsibility and accountability. As the program progresses, the schedule should be reviewed periodically and revised if necessary.
- Criteria for measuring the results of the program should be decided upon in advance, as well as the intervals at which the results will be evaluated. This checking will make it possible to discontinue or modify any part of the program that isn't paying off. Without constant evaluation, a program may get nowhere—at a heavy cost in time and effort.

Specific steps

In broad outline, these are the over-all requirements for a full-scale work-simplification program. Let's narrow our goal now to a single problem and consider the specific steps that can be taken to solve it.

Pick the job to be studied.

In our mythical office, we'll focus on a common clerical routine—collating pages for a report. Here's how it's being done now: The employee lays the pages in piles along a flat surface and walks back and forth, picking up a sheet at a time with one hand and holding the accumulated sheets in the other. It's a slow, laborious procedure. How can it be made easier and faster?

Break down the job into its components for easier analysis.

Classify it by homogeneous elements, measurable units, identifiable activities, or according to the different work stations or departments involved.

The components that go into a collating job are: pages, a work surface, the method used, and the employee. Time, energy, and work habits are other factors that should be considered.

Question each component that has been identified.

Here are questions you might ask about the collating job: Does the employee have to walk back and forth? Does she have to stand? Should the pages be laid in a straight line? Is it most efficient to arrange the pages in consecutive order? Is there a better alternative to having the employee pick up the pages with one hand and accumulate them in the other?

Look for better procedures.

Here are some questions you should ask—and some answers you might arrive at:

Q. What alternative methods are there?

A. We can: (1) simplify the procedure by applying principles of motion economy; (2) buy collating equipment.

Q. What principles of motion economy could be used?

A. We can: (1) place pages within the arc area of easiest reach; (2) arrange them so the employee can use a smooth, continuous sequence of motions; (3) equalize the work of each hand; (4) direct the

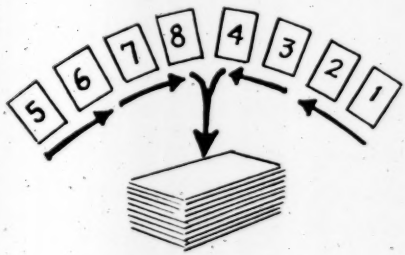


Figure A

arms in symmetrical, complementary patterns; (5) minimize body movements—that is, avoid arm movements if finger movements can do the work; (6) design fixtures to facilitate the work.

Q. How can we find out if it will pay to purchase collating equipment?

A. We must investigate the costs of buying and operating collating equipment and compare them with the costs of redesigning the methods and fixtures being used now. Collating equipment should be studied and companies that have used it should be asked about their experience.

Design the new procedure that is finally decided upon.

Collating may be infrequent in this office. Rather than invest in equipment, we decide to redesign the procedure.

The employee now sits at her work station, with the pages arranged so that her movements can be *smooth and continuous.* Each hand does an equal amount of work. She uses only her hands and arms—there's no walking or bending. (See Figure A.)

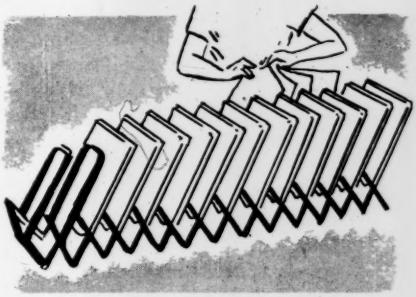
This revised method can also include a simple mechanical fixture, with dividers. (See Figure B.)

If collating is a frequent activity in this office, a collating machine may be the best choice. New procedures can be worked out to fit the type of machine purchased.

Try out the new method.

Employees must be taught how to use the new collating procedure. Since work habits are not easy to change, the supervisor should devote plenty of time to training, and fully explain the benefits of the new procedure.

Figure B



Evaluate the new method.

If a new method does not work out exactly as anticipated—and it seldom will—the supervisor shouldn't be afraid to admit it has weaknesses. Revisions should be incorporated into the new procedure with a maximum of employee participation and a minimum of disruption.

Staff participation

Work simplification is not just a mechanical process of designing new ways to do a job. Equally important—and often more challenging—is the need to gain employee acceptance of the change. This problem should be tackled early in the program by getting employees to actually participate in working out the new job procedures.

Some managers feel this is a waste of time. They will say: "Just tell them what to do—they get confused if you ask them to *think* about what they're doing," or, "They don't really care, anyway."

These supervisors seriously underestimate the rich reservoir of useful suggestions that exists within the average office staff. Compare the small cost of tapping this reservoir with the high cost of an office staff that functions at 50 per cent efficiency.

A supervisor might start out by asking small groups of his employees to study their work methods, desk layouts, work flows, and departmental procedures. Their interest can be stimulated by examples of how other employees have come up with valuable suggestions.

Encouraging your employees to experiment will help them produce fresh ideas for saving time and effort. Not all the ideas will work out, of course, and employees should be reassured that it's no mark against them if their suggestions do fail. Your most important goal is to gain their acceptance of work simplification and their participation in making it a practical success. ♦

Subway to Space

AN OLD RELIC of underground travel is playing a part in space travel, notes *The New Englander*.

A 52-ton generator which 40 years ago fed power to Boston's subway system is now the backbone of an outer-space study by Lockheed Aircraft Corp., Palo Alto, Calif.

The generator, anchored in six feet of concrete beneath the Lockheed labs, furnishes concentrated heat to the power chamber of a high-speed wind tunnel that tests metals and other materials for space flight. It can produce enough electricity to heat air to temperatures of 4,000° F. at pressures of up to 3,000 pounds per square inch.

MEET THE STAFF:

THE PRODUCTION CONTROL GROUP

By Samuel Farmer

Purchasing Division Manager
American Management Association

What do these specialists do? How do they help the supervisor?

RECENTLY, A BLOCK-LONG, $200,000 wire-making machine sat useless in a large Midwest production-tool plant while the customer who had ordered it raised a storm.

"What happened?" the plant manager demanded of the general foreman. "That machine was supposed to have been delivered a week ago."

"There's a shortage of material," the foreman replied.

"Well, what's missing?"

"Eight aluminum bolts."

Soon afterward, this company decided to set up a production control department.

Most sizable companies already have formal production control and scheduling departments. Some companies, however, still do without them. Are they really necessary?

For the answer, let's take a look at the complexities of modern manufacturing. Consider the machines in your plant, for example. Do they all produce the same number of pieces per hour? Use identical raw

material? Have the same frequency of breakdown? Is each manned by the same number of workers?

If you can say "Yes" to these questions, your company probably doesn't need a production control department. But such plants are rare. Since the typical plant has a great variety of machines, processes, and types of raw material and product, a centralized group is needed to balance the output of different departments. Its job is to plan priorities for each department so that production orders get out on schedule.

Here are some of the problems the production control department faces—and how it deals with them:

Fluctuation in business. An upswing in customer orders is always welcome, but it also creates problems. In order to turn out the additional goods, overtime work is often necessary. If the upswing continues, production control must answer this question: Will it be more economical to continue the overtime or to hire and train new employees to handle the added volume? Before making a decision, production control will check the backlog of orders, forecasts of future orders, and how closely department foremen are maintaining existing schedules.

Unavailability of material. What if a raw material or a component for an assembly is temporarily unavailable? Production control may decide that money can be saved by manufacturing some of the subassemblies in advance, using material on hand—perhaps combining these with other orders. This skipping procedure can cut down the final assembly time when the missing material is received. On the other hand, if work-in-process inventory levels must be kept as low as possible, the entire shop order may be held back until the needed material comes in. Basically, this is a decision between keeping costs as low as possible and making delivery as fast as possible. Unless he knows the thinking that's gone into the decision, a department foreman may be bewildered when an order comes down to hold up work on a particular component or subassembly.

Anticipation of breakdown. There are two more reasons production control may hold up an order: Equipment is close to breakdown or quality output is no longer possible without a machine overhaul. Production control will wait until the needed repair work is done before putting the order into process.

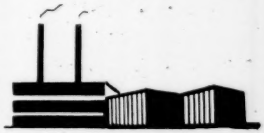
Freight costs. For economy, production control may have to hold a large completed order in the plant until another order is finished. The two orders will then be shipped out together to save on freight costs.

Special order. A foreman may be in the middle of a smooth, large-volume run on a certain part when he's told to stop the run and set up his equipment to make a few pieces of another part. When this short run is over, he has to reset his equipment for the long-run part.

How come? An important customer called up for some replacement parts he needed to maintain his production run. The company loses money making these parts—but the customer is a big one.

Estimates. Making time estimates is one of production control's most important functions. When a customer's order is received, the scheduling group must convert each item on the order into hour backlog —the number of hours it will take to make the item (or perform a service). If there are previous orders for the same item, this order is added to them so that all the orders can be filled in one economical run.

If the item has been made before, tested time standards can be used to figure the hour backlog. When there's been little experience in making an item, temporary standards will be used and adjusted according to information fed back by the foreman. If the item has never been made before, running time must be estimated on the basis of the most similar work that has been done previously.



Making such estimates is particularly challenging in a large-job shop operation. There may be thousands of components to produce for the final assembly. Since production control's original time estimates for many of these parts may be off—or may have to be readjusted because of the need for rework—it's easy to see that production can get out of balance, killing chances of profit. To keep on top of things, production control must maintain a constant check on the progress of every subassembly or component being produced.

Inventory. Delivery of raw material and semi-finished components must be right on the button—neither before nor after the department foreman actually needs them and has the machines available for them. If the foreman gets expensive raw material far ahead of the time he needs it, too much money may be tied up, and the company may have to borrow to meet its payroll. The interest it has to pay on the loan will cut into the profits on the order when the finished goods are finally shipped.

These are just some of the factors with which production control must deal when trying to work out a production schedule. There are others, such as experimental runs that must be made in a hurry, customer rework, repair, limitations in floor space, and shortage of skilled help. All these variables make it impossible to set up a permanent, unchanging schedule. Constant changes and revisions are necessary to adjust it to unforeseeable events, as well as to routine change-overs.

The foreman's role

Because it involves plant-wide planning and coordination, production control is not a function that can be handled by the individual foreman. He can play an important role, however, in helping the production control group do its job efficiently.

Production control depends on full, reliable information—and the foreman probably knows his own department better than anyone else in the company. His experience will help him spot impending trouble when he looks at a production schedule. Knowing his employees, he can see human factors that may upset apparently logical paper calculations.

Here are two examples of how a foreman contributed to smooth production by cooperating closely with production control:

In one company, the foreman of a department that sheared and welded components for metal cabinets was given a production schedule for a heavy order. Some quick calculations told him that he lacked the floor space to handle it. Instead of waiting for production control to hang itself, he suggested an engineering change in the manufacture of the cabinets. Rather than making the cabinet posts separately, the new method incorporated them into the cabinet sides, eliminating several steps in assembly and freeing enough floor space for the heavy order.

In another plant, production control was constantly thrown off schedule because the setup men were frequently busy on other jobs when a changeover was slated. On the basis of facts supplied by the general foreman, a plan was worked out whereby the setup men—spread out over three shifts—were able to make their setups in advance. They were then free for any machine and press changeovers scheduled.

Collaboration

The foreman's active cooperation with production control should include systematic reports on the progress of a production order, and particularly on reasons for delay, such as absenteeism, quality rechecks, or breakdown. In turn the foreman should expect cooperation from production control. The most frequent source of friction is production control's demand for more output. Such friction can be avoided if production control consults the foreman beforehand, telling him why more output is needed and getting his opinion on how it can be achieved. In one company making thermostats, production control asks the foreman to review the production schedule for the coming month two weeks beforehand, so that he has time to estimate the percentage of improvement he must make. For five years the company has shown growing profits—and one reason is the cooperation between production control and foreman in achieving plant objectives. ◆

IF YOU WERE THE ARBITRATOR...

By Morris Stone
Editorial Director
American Arbitration Association

Youth vs. Age

FRANK R., foreman in a textile mill, knew that under the union contract, promotions had to be given to the senior candidate, provided he was qualified to do the work. But he discovered that opinions differ as to what "qualified" means.

There was a vacancy last summer in the spinner's helper classification, and three unskilled laborers applied for transfer to that job. The three were fairly equal in general ability, but one was a young man of 27, whereas the others were elderly employees within a few years of mandatory retirement age. Under the circumstances, Frank gave the job to the younger employee, even though he was also junior in seniority. The two older men promptly filed grievances.

"You can't disqualify a man solely because of his age," the shop steward argued. "The contract gives preference to senior men provided they are qualified to do the work—and you admit that these two are. Nothing else matters."

" 'Qualification' consists of many things," the foreman answered. "Why break in a man on a job he isn't going to stay with? A helper ought to be a young, adaptable fellow with potential for further growth. Looking at it that way, I say that an employee who will retire soon is automatically unqualified."

The dispute went to arbitration.

How would you decide this case?

_____For the union?

_____For the company?

_____Compromise? If so, how?

The arbitrator's decision is given on page 51.

What you should expect from a Health Checkup

by Michael H. K. Irwin, M.D., M.P.H.
Health Officer, United Nations

IN MOST OFFICES, annual audits are common practice. In factories, machines are periodically checked and overhauled. Yet how many of the people in these offices and factories see a physician regularly except to be treated for an illness?

A recent study of 73,000 families by the U.S. Public Health Service showed that nearly four out of five persons over 65 had a chronic disease of some kind; and, in the 45-to-65 age group, slightly more than half of those interviewed were similarly afflicted. Obviously, it makes sense to look for evidence of these diseases as early as possible. While periodic check-ups will not prevent disease, they frequently make it possible to prevent or alleviate complications.

For example, if diabetes is left untreated it causes damage to the blood vessels, eyes, and nerves. Yet if it's caught early the only treatment needed is often just diet and pills.

Another example: Many kinds of cancer can be detected before symptoms develop. Cervical cancer is

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This article was condensed from *Check-Ups: Safeguarding Your Health*, a pamphlet published by the Public Affairs Committee, 22 East 38th Street, New York 16, N.Y. Available from them for 25 cents for single copies; special rates for quantities.

about 100 per cent diagnosable on check-up, as are most kinds of skin cancer, breast cancer, and oral cancer. Only 20 per cent of cancerous conditions, however, appear in sites that are clearly visible to the naked eye; another 30 per cent can be felt by the experienced physician.

In addition to uncovering incipient disease, periodic health check-ups are useful in re-evaluating a chronic condition such as a hernia or hemorrhoid, to determine whether it has progressed since the previous examination.

Detection and evaluation of chronic disease are not the only benefits of a regular medical examination. Just as important, it can help a well person retain and perhaps improve his health. This is the basic goal of preventive medicine.

Background data

What happens during a medical check-up? If it's your first examination, the doctor may begin by asking detailed questions to get a thorough record of your previous illnesses and operations, past and present symptoms, the health of your parents and close relatives, your habits, and your occupational history. (At subsequent check-ups, such questions will cover only the period between examinations.) He will want to know something about your personality, your daily life, the extent of your medical knowledge, and your sense of values. Only by assessing all of this information along with the results of his examination can he accurately evaluate you and decide how your health can be maintained or improved.

Physical exam

The doctor will give you a complete physical examination—the more complete the better. First, he notes your general appearance, skin condition, height, and weight. He tests your vision (with glasses if worn normally) and examines your eyes. He may also inspect the inside of your eyes and test the eye muscles. Your hearing may be tested approximately by the spoken or whispered voice or precisely by a special machine in a soundproof room. Eardrums, teeth, nose, tongue, throat, and neck glands are inspected.

The doctor then checks your chest, noting the breath sounds in the lungs and the sounds from different sections of the heart. Your pulse and blood pressure are recorded. The doctor feels the various organs in the abdomen and checks for a hernia. In women, breast and pelvic examinations are vitally important. In both sexes, a digital examination of the rectum is also customary. Your arms, legs, and spine must be inspected. Finally, your nervous system is examined by testing certain reflexes and sensations.

Two recently-adopted procedures are extending the value of the physical check-up: the measurement of the pressure in the eye and the passage of a sigmoidoscope into the rectum and lower colon to check for

ulcers, as well as growths that are abnormal.

The extent of laboratory tests and X-ray examinations should depend upon the results of your physical check-up. Routinely, a urinalysis (testing for sugar, albumin, and other substances), hemoglobin measurement, a serological examination of the blood, and a chest X-ray should be done. A Papanicolaou smear during the pelvic examination of a woman to detect uterine cancer, and an electrocardiogram should also be part of the examination of those 45 or over. But other tests and X-rays should be made only if indicated by what the doctor learns from questioning and examining the patient.

Health counseling session

A thorough medical check-up should be followed by an equally thorough health-counseling session. The doctor should give you a full explanation and interpretation of his findings. He should let you know how to recognize suspicious symptoms that you ought to report to him. And he should correct any false ideas or fears you may have about your health. With his detailed knowledge about you, he can tell you exactly how to maintain and improve your health. He should give you sound, personalized advice on smoking, drinking, exercise, rest, diet, the taking of laxatives and sedatives, and other matters affecting your health. Community action can fluoridate your water and pasteurize your milk, but only you can improve your personal habits. Intelligent living now will help your health in future years.

Health counseling should establish a frank, trusting relationship between you and your doctor. Such a relationship is particularly valuable when he must treat you for a chronic or acute illness.

Mass tests

Another, less comprehensive type of medical check-up is known as "multiple screening." This consists of two or more laboratory tests (for example, measuring the hemoglobin and the blood-sugar level) or other examinations (such as a chest X-ray) given to large groups of people on an assembly-line basis to detect unrecognized or incipient disease. These check-ups are usually made by technicians, not doctors. Multiple screening aims at finding diseases such as tuberculosis, syphilis, diabetes, glaucoma, anemia, and cardiovascular conditions that can be detected by relatively simple tests. Multiple screening makes it possible to examine quickly and cheaply many people who might never have seen their own physicians for full check-ups. Some doctors feel, however, that because a person's health cannot be appraised by laboratory tests alone, the mass tests often fail to spot health problems. A false sense of security may thus be given to those who have an early disease that could be uncovered only by

Sample Questions For Your First Medical Check-Up

Name _____ Sex _____
Address _____
Date of birth _____ Birthplace _____
Present marital status _____
What is your usual occupation? _____

FAMILY HISTORY

RELATIVE	AGE (if living)	STATE OF HEALTH If living present health If deceased cause of death	AGE AT DEATH
Father			
Mother			
Brothers			
Sisters			
Husband/Wife			
Children			

Has any relative had: Heart disease? _____ Diabetes? _____
Tuberculosis? _____ Asthma? _____
Mental disorders? _____ Cancer? _____
Paralysis? _____ Epilepsy? _____

PAST MEDICAL RECORD

Have you had any of the following diseases or disorders? If so, state the approximate date:

Scarlet fever _____	High blood pressure _____	Gall Stones _____
Rheumatic fever _____	Pain over the heart _____	Hemorrhoids _____
St. Vitus' dance _____	Sleeplessness _____	Repeated bronchitis _____
Pneumonia _____	Fainting speels _____	Depression or worry _____
Pleurisy _____	Nervous troubles _____	Varicose veins _____
Asthma _____	Veneral disease _____	Hernia _____
Tuberculosis _____	Epilepsy _____	Dysentery _____
Hay fever _____	Ulcers of stomach _____	Kidney trouble _____
Heart disease _____	Jaundice _____	Tropical diseases _____

Have you been hospitalized? _____ Why and when? _____

Have you had any accidents? _____ What and when? _____

Have you been advised to have any operations which were not performed?
If so, specify _____
Have you consulted or been treated by clinics, physicians, healers or other practitioners within the past three years? If so, explain _____

Have you ever required treatment outside of a hospital for longer than one month?
If so, for what? _____
Have you ever been denied life insurance? _____
Have you ever been refused employment because of your health? _____
Have you ever had any illnesses or injuries other than those already noted?
If so, give details _____
Have you ever had a chest x-ray? _____ What was the date of the most recent one? _____ And, the first one _____ Where were they taken?
_____
When did you last see your dentist? _____
Did you have all the work recommended by the dentist done? _____
When did you last have your eyes examined? _____ Do you need glasses? _____
What do you consider your ideal weight? _____ What has been your highest _____ and lowest _____ weight during the past three years?

PRESENT HEALTH

Have you now, or recently had, any of these complaints?

Sinus trouble _____	Indigestion _____	Difficult urination _____
Cough _____	Diarrhea _____	Swelling of ankles _____
Blood spitting _____	Nausea _____	Boils _____
Sore throat _____	Constipation _____	Earache _____
Palpitation _____	Vomiting _____	Loss of appetite _____
Dizziness _____	Blood in stool _____	Loss of weight _____
Shortness of breath _____	Blood in urine _____	Increase in weight _____
Abdominal cramps _____	Fatigue _____	Pain _____ Where? _____
Backache _____	Irritability _____	Abnormal bleeding _____
Headaches _____	Nervousness _____	Hoarseness _____

New moles or lumps, or changes in the size of old ones _____
Are you now being medically observed or treated for any condition? _____
If so, what and by whom? _____
Are you aware of any condition for which you believe you now need or will need treatment? If so, what? _____
Is your hearing defective? _____ If so, how does it inconvenience you?
_____
Is your sight defective? _____ If so, does it interfere with either work activity or recreation? _____
What medications do you take regularly? _____
Sleep: Number of hours _____ Do you feel tired in the early morning? _____
Do you use laxatives? _____ If so, what kind? _____
Recreation: What kind? _____ How often? _____
Tobacco per day: Cigarettes _____ Pipes _____ Cigars _____

FOR WOMEN

Are your periods regular? _____ How long do they last? _____
Are they painful? _____ Ever need to go to bed because of pain? _____
Date of your last period _____
Any bleeding or discharge between periods? _____
Number of pregnancies _____ Has menopause occurred? _____

laboratory and other tests more specifically pinpointed.

Sometimes a program of thorough, regular check-ups is impossible because of a shortage of medical personnel. In such a situation multiple screening can be useful during the years between thorough check-ups —if it includes certain basic observations (such as measuring the blood pressure, in combination with a chest X-ray), a few laboratory tests, and a brief interview with a nurse or a doctor.

Where to go

Take your time in selecting a doctor to perform your periodic check-ups. The doctor you choose should meet three basic requirements. He should have the training, interest, and time to make a comprehensive examination. If you have a family physician, he is probably your best bet, particularly if he is on the attending staff of a good hospital.

If there is a group practice in your area, it may be another good place to go for periodic check-ups. Today, 16,000 physicians in this country—10 per cent of all those in practice—work together in groups, with a mutual responsibility to their patients and to each other. With offices under the same roof, they can easily refer patients from one to another if the need arises. Most of the 1,200 groups now operating are well-equipped to make regular check-ups. Many of them are in large cities, but some groups are appearing in rural communities—such as the Rip Van Winkle Clinic in New York State, which provides medical service to an area of nearly 800 square miles.

You may also find that your company has a medical department that can give you periodic check-ups or arrange for them at an outside clinic specializing in such examinations. It is important that the physician giving you the check-up keep in close touch with your family doctor, to follow up treatment of any diseases. But if none of these sources is available to you, call the county medical society or the nearest large general hospital; you will usually be given the names of three or four physicians or clinics.

It's best to have each regular check-up made by the same doctor, because of his familiarity with you and your health. This makes it easier for him to detect deviations from the norm that may indicate acute or chronic disease.

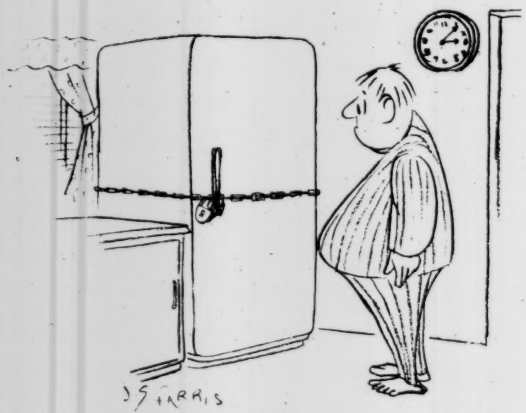
How often should you have a check-up? That depends primarily on your age and your state of health. Ideally, the frequency is: monthly check-ups in infancy, quarterly vis-

its for the toddlers, semi-annual examinations for the preschool child, once every two years for the school child and the young adult, and annual examinations for those over 45. Of course, this plan should be altered whenever specific conditions are suspected or are being followed in a patient, or when close relations contract certain diseases, like diabetes, which might indicate a family susceptibility.

Just as important as the actual check-up is careful follow-up. If the examination has been made by your family physician, he will either treat abnormal conditions that he has discovered or refer you to a competent specialist. In the latter case, your own doctor and the specialist will decide which one should continue to see you. However, if you have had your check-up at work or in a clinic, and if any treatment is required, the results should be sent to your private physician or, if you do not have your own doctor, to someone the clinic will recommend.

Never wait until your regular check-up time to report any suspicious symptoms that develop between examinations. A check-up does not *guarantee* you perfect health till your next check-up, although it does make the appearance of symptomatic disease less likely. It is basically a safeguard.

There is everything to be gained and nothing to be lost in having a periodic medical check-up. Most of us, unfortunately, stay away from doctors until we are forced to recognize symptoms of ill health. But such symptoms may never occur if we stick faithfully to a program of periodic medical check-ups. ♦



LET'S GET DOWN TO CASES

Every month, SM presents true stories of problems supervisors have faced. How would you solve them? You might discuss the case with a group of people—fellow supervisors, family, friends. Each person, you'll find, has his own way of looking at the problem.

A Mixed Blessing

"ARTISTS! They're all temperamental—or crazy!"

As head of the drafting department in the big, expanding Barrow Bros. Engineering Company, Larry Decosta had handled plenty of artists and plenty of temperament—but this was a new one on him:

From the start he had been impressed by Hal Parker. Hal's blueprints were real works of art. The young man was thoroughly trained technically; besides, he was fast and imaginative. And Barrow Bros. could use all the staff imagination it could get in developing plans for a series of important new contracts.

Larry simply had to have an assistant to help him handle the new assignments, and Hal would be exactly right—except for one, big "if." If only he were reliable! At least once every two weeks he didn't show up, and sometimes his absences seriously disrupted the work flow. For such a healthy-looking young guy, he certainly had a lot of ailments, it had seemed to his boss. But Larry had soon found out that they weren't ailments; in spite of his obvious interest in his work, Parker was simply a chronic goofer. Larry didn't know exactly why, and couldn't get an explanation even when he asked Hal point-blank—but he suspected that outsize hangovers were the answer.

Larry knew that emotional difficulties are often behind excessive drinking, but Hal's polite reticence made it awkward for him to discuss personal problems. And Parker never batted an eye when he was docked for his absences, though he was always apologetic, even shamefaced, about them.

When he was at his drawing board, Parker was worth two of any of the other draftsmen. Larry wouldn't even consider firing him, but he'd been puzzling over the contradiction of excellent work and erratic attendance for months. Today, at last, he thought he had a perfect solution—give Hal more incentive by giving him more responsibility!

He had called Hal into his office, and with genuine warmth had said, "Hal, as you know, we're under terrific pressure from these new clients; they're the biggest we've had yet. Frankly, you're far and away the best man on the staff, and I'd like you to take over supervision of the five draftsmen working on the Thayer Metals account. It will mean more money for you, of course."

He was floored when Parker replied, "I'm really flattered and appreciative, Larry—but I just can't do it."

Larry persisted: "But it's a wonderful opportunity. I really need your help, and we both know you can handle it."

Hal broke in: "But that's the whole thing—I *can't* handle it! I just don't want the responsibility—I couldn't take it. I'm just not built that way!"

And that's all Larry could get out of him. His star employee would rather go on as he was, making less money—even being docked regularly—and even feeling ashamed every time.

It was at the dinner table that night, when Larry was explaining the latest development of the Parker problem to his wife, that he burst out:

"Artists! They're all temperamental—or crazy!"

Consider these questions—and ask your own:

1. Do you think Larry has handled the problem of Hal's chronic absenteeism properly? _____

   _____

   _____

2. How should Larry deal with that problem now? _____

   _____

   _____

3. Should Larry try to change Hal's attitude toward accepting more responsibility? _____

   _____

   _____

Readers Discuss SM Cases

Here are readers' discussions of September's case. A copy of *Leadership on the Job*, AMA's handbook for supervisors, has been awarded to each of this month's contributors.

Don't Call Us, We'll Call You

(September, page 31)

Case synopsis:

Two weeks ago Bill Henshaw came to Mike Lodovick, foreman at Hudson and Jay Optocal Company, with a cost-reduction suggestion. Mike was particularly pleased by this response to his campaign for suggestions because he had heard via the grapevine that Bill was sore about a three-day layoff Mike gave him three months ago. Although a skilled, valuable worker, Bill was given to horseplay, and as a result had damaged some costly material.

Mike, who hadn't mentioned Bill's sore feelings, saw a chance to show Bill he wasn't being discriminated against. He told Bill that the idea had definite possibilities, and asked him to write it up; Bill submitted it formally the next day. On reading it, Mike realized that it was impractical, but decided to wait before giving Bill the bad news. He slipped the paper in his desk drawer and when Bill asked about it, Mike told him the industrial engineer was looking at it.

Today, Mike had decided he could stall no longer when his boss told him Bill was asking for a transfer. Mike's boss reported, "He says you told him his cost-reduction idea was pretty good, but you're sitting on it because you've got it in for him."

Root of the trouble

MIKE IS IN TROUBLE because he took no action when he heard that Bill was sore about the three-day layoff. Mike should have talked with Bill immediately and cleared the air. He dug his hole deeper by lying about giving the suggestion to the industrial engineer.

After realizing that the idea was impractical, Mike should have talked it over with Bill at least within a day. Since Bill is a skilled, valuable employee, he would under-

stand if the impracticality of his suggestion were clearly explained.

Impractical employee suggestions should be refused as soon as possible so that the employee won't build up false hopes; he deserves a straightforward explanation. He should be praised for submitting the suggestion and urged to submit future ones.

—GLORIA D. SPRAGUE
Department Head, Household Insurance Department, United Services Automobile Association, San Antonio, Tex.

Man overboard

MIKE WENT overboard in his initial enthusiasm. This, plus his unwillingness to face up to facts, has blown the situation out of proportion.

He should talk to Bill and explain the whole situation. He should also make it clear that the past incident is water under the bridge.

When an employee brings you a suggestion, give him your full attention and write down notes and questions while you discuss it. If the idea is impractical, ask questions that make it so apparent that *he* will tell *you* it is impractical. Thank him for submitting his idea and encourage him to return with new ones.

—JOHN J. RANKIN
Department Manager, Stein, Hall & Company, Inc., Charlotte, N.C.

Too late

IT IS TOO LATE NOW. Mike should not try to get Bill back. But he *should* profit from this lesson and overcome his tendencies to procrastinate, on the one hand, and to make rush decisions, on the other.

In the future, when an employee presents an idea, Mike should take time to see if it is worth anything before committing himself. And, if it must be rejected, he should explain every aspect in detail and make sure he is understood. Obviously, a word of encouragement is in order, too.

—ROGER DAME
Production Planning Supervisor, Doric Textile Mills Ltd., St. Johns, Quebec, Can.

A meeting of minds

THE ONLY THING Mike can do now is to admit his poor handling of the suggestion. Mike's boss has the ball now, and he'll have to call Bill and Mike in for a meeting of minds.

After exploring the possibilities of the suggestion, Mike should have called Bill in to explain that while his idea had possibilities, it needed some changes before it could be used. Mike should also have offered to help him shape his idea into an acceptable one.

—MARIUS H. HVARRE
Service Manager, Charles Bruning Company, Inc., Teterboro Branch, Teterboro, N.J.

Salvage it

ALTHOUGH HE SAID Bill's idea had definite possibilities, Mike dropped it without even consulting Bill on its weaknesses!

Mike should have gone over the

plan with Bill, pointed out the problems, and allowed Bill to solve them or reject the plan himself. Part of the suggestion might have been salvaged. Now, Mike should have a conference with Bill and the industrial engineer together.

—E. L. LIEN
Assistant Accountant, MacMilland Bloedel & Powell River Company Ltd., Somass Division, Port Alberni, B.C., Can.

Typewritten rejection

MIKE SHOULD HAVE reserved judgment until he had received the typewritten copy of the suggestion. He could have expressed his pleasure at receiving the suggestion from Bill and encouraged him to submit other ones. A typewritten note to Bill outlining reasons for the rejection of the suggestion would probably have satisfied Bill and prevented his asking for a transfer.

—HARRY BOELHOWER
Area Supervisor, Union Carbide Canada Ltd., Visking Division, Lindsay, Ontario, Can.

Early response

MIKE NEGLECTED to have a talk with Bill right after his layoff and explain policy regarding horseplay. He could have convinced Bill he had no cause for resentment and that any thought of discrimination was out of the question.

All rejections of employee suggestions should be explained to the employee as soon as the decision has been reached. In any case, an early response—even a rejection—would probably encourage other suggestions.

—SAMUEL R. ZINGER
Superintendent, Inspection & Shipping Department, Universal Cyclops Steel Corporation, Bridgeville, Pa.

Impartial third party

MIKE SHOULD HAVE taken the suggestion to the next level of evaluation so that an impartial third party could officially reject it. Now, Mike's boss should tell Bill that his suggestion is being considered, and that if he still wants a transfer it will be granted. He should not disclose that the suggestion really was pigeonholed.

—JAMES B. RILEY, JR.
Management Analyst, Social Security Administration, Baltimore, Md.

The germ of an idea

MIKE SHOULD STUDY all suggestions carefully to see if they can serve as the basis of better ones. Many a trivial idea has furnished the germ from which something worthwhile grew.

If he finds such a germ, he should discuss the idea with the employee and guide the discussion so that improvements will occur spontaneously to the employee. This seems tricky, but it can be done. If details remain to be thrashed out by the employee, so much the better.

—CHARLES H. CHANDLER
Manager, Electronic Process Development, Gillette Safety Razor Company, Boston, Mass.

A committee

MIKE SHOULDN'T have committed himself until he had read the suggestion. He should have asked the industrial engineer and one or two other department heads to evaluate it, and then should have passed the evaluations on to Bill as soon as possible.

Top management in this company should appoint a committee to consider employee suggestions for cost reduction. It should include department heads and the industrial engineer and it should meet regularly. Employees would then know that top men of the firm were reviewing their ideas, and how long they'd have to wait for a verdict.

—CONSTANTINE ANDREADIS
Shift Manager, Nathan's Famous, Inc., Coney Island, Brooklyn, N.Y.

Apologize

THE DAY HE RECEIVED the typewritten suggestion, Mike could have discussed the flaws with Bill and weeded them out. Mike certainly should not have lied about the industrial engineer's having the paper.

Now, Mike should tell his boss the entire story; then he should personally apologize to Bill and explain his actions.

When a suggestion is impractical, a supervisor should point out the objection carefully and slowly. In some cases, the suggestion might benefit a particular department, but not the company as a whole.

—LOIS LANGNER
Supervisor, European Correspondents Section, United Services Automobile Association, San Antonio, Tex.

YOU CAN WIN A BOOK!

Send in your opinions on this month's case, for publication in SUPERVISORY MANAGEMENT. *Or send a case of your own—a tough situation either you or a supervisor you know has faced.*

If your comment or case is accepted for publication, you will receive an award: a copy of Leadership on the Job, AMA's 300-page handbook for supervisors.

Send your contribution to Let's Get Down To Cases, SUPERVISORY MANAGEMENT, *American Management Association, 1515 Broadway, New York 36, N. Y.*

Letters on this month's case should be postmarked no later than November 30.

Digests of the month

PATENTS and PROGRESS

THIS PAST SEPTEMBER the U.S. Patent Office issued its three-millionth patent. For 171 years, the U.S. patent system—built on foundations laid by Jefferson, Franklin, and Washington—has been encouraging progress by protecting inventors' ideas. Today, almost every ten minutes someone in this country—a part-time inventor or a scientist in a corporate laboratory—has an idea on which a patent will eventually be issued.

The original patent law of 1790 permitted the government to grant a patent to anyone who applied, without restrictions. In 1836, however—because of confusion and law suits resulting from conflicting claims—Congress passed a law requiring that each claim be examined for its originality and merit. Now 1,000 examiners, trained in both science and law, examine some 80,000 patent applications in Washington each year.

The 300 chairs in the Patent Office's "search room" are almost always occupied by hopeful inventors, by their attorneys, or by representatives of companies in which an invention has been developed. Many other visitors are there looking for ideas, for the Patent Office boasts the world's largest library of applied technology. All U.S. patents, and some seven million foreign ones, may be examined there free of charge, and a copy of any U.S. patent can be purchased for a quarter.

Big as they are, these areas of information are not difficult to explore. An assistant will help a visitor find the main class (out of 300) and then the subclass (out of 57,000) in which an inventor's idea belongs. After that, in less than a minute, an attendant will deliver all the pertinent U.S. patents, including cross-references.

Background of a patent

Anyone may file a patent application for a fee of $30, and he can prepare and follow through on his application without employing an attorney or agent. However, the Patent Office strongly advises inventors to engage a "practitioner" listed in the Patent Office register. Most are lawyers; all have knowledge and experience in the patent field.

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Before filing an application, the practitioner usually searches the records for prior patents that might conflict. (At this point, of course, many hopes are dashed.) Sometimes the search can be made without visiting Washington: Some 300 libraries around the country have copies of the Patent Office Gazette, which lists patents numerically, and about 50 libraries have copies of classification lists in which all pertinent patents can easily be located.

Obtaining a patent nowadays may take two or three years, because there is a backlog of almost 200,000 applicants. Every year, it takes longer and longer to examine certain kinds of applications, because the volume of scientific literature to be searched is steadily growing. In a single year, for example, some 10,000 technical papers may be published on subjects related to rocket fuels; before a patent can be granted to a reseacher in this field, all these papers must be read.

Mechanized assist

The Patent office has begun to use computers to help determine whether or not a chemical invention is, as the law requires, "a new composition of matter." Millions of compositions of matter are already in existence, some distinguished only by a minute difference in atomic and molecular arrangement. Fortunately, diagrams of chemical structures, showing the relationships of atoms and molecules, fit well into the system of instructions that a computer must have for its "memory."

Many corporations have giant research laboratories, employing thousands of scientists. Yet invention remains essentially an individual process, and the Patent Office never issues a patent to a corporation as an inventor. All patents are issued in the name of an inventor or a group of co-inventors, although in company research laboratories inventors ordinarily assign their patents to the employer.

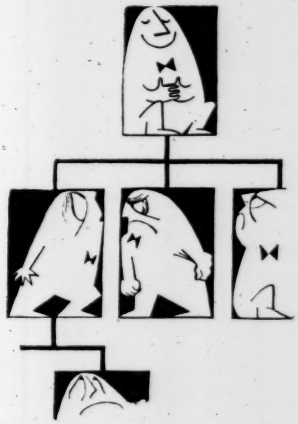
The basis for the U.S. patent system lies in the first article of the Constitution: "Congress shall have the power to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries."

The system worked so well that in 1844 the Patent Commissioner remarked, "The advancement of the arts, from year to year, taxes our credulity and seems to presage the arrival of that period when human improvement must end." Happily, the commissioner was wrong.

• THE LAMP
Standard Oil Company (N.J.)
Vol. 43, No. 2

THE FIRST GREAT RULE of life is to put up with things. The second great rule is to refuse to put up with things. The third and hardest great rule is to carefully distinguish between the first two.

—SYDNEY J. HARRIS, in *The Chicago Daily News*



LEADERSHIP:
WHAT IS IT?

MANY MANAGERS have tried to analyze leadership in terms of popularity, power, showmanship, or long-range planning. But is leadership any one of these things?

The successful leader may not be popular; his followers may never do what he wishes out of liking or admiration for him. He may not possess or display power; force or threats may never enter into his relationships with his subordinates. He may not be a colorful person; he may never use showmen's tricks to dramatize the purposes of the group or to focus attention on his leadership. And as for planning, he may be a man of little influence or even little skill; he may merely be carrying out the plans of others. These attributes, then, are not the essence of leadership.

Is a man a leader because the organization chart says he is? The existence of a chain of command does not insure that the work will get done. Instead, it is like the diagram of a football play: It shows a general plan and how each individual contributes to it. By itself, it has no bearing on how well executed the play will be.

Is leadership an extension of the rule, "Treat others as you would like to be treated"? Many men follow this rule and are ineffectual leaders because of it. It never occurs to them that others have tastes or emotional requirements different from their own. It is true that the prime motives of people are often very much alike, but the strengths and importance of these motives are not the same for every worker nor is the degree to which they can be satisfied in his job. The successful leader has learned two basic lessons: Men are complex, and men are different.

Is leadership the exercise of democracy? It is no good to pretend that certain decisions can be made by subordinates if in fact they can't. In indus-

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try, the lines are usually drawn clearly between those decisions that belong to the manager alone and those that can be made by or in consultation with the subordinate. Once those lines have been drawn, it is essential not to cross them unless absolutely necessary.

Positive qualities

What, then, *is* leadership? It is the accomplishment of a goal through the direction of human assistants. The man who successfully marshals his collaborators to achieve particular ends is a leader. The man who can do so day after day and year after year in a variety of situations is a great leader. The leader's unique achievement is a human and social one, which stems from his understanding of his colleagues and the relationship of their individual goals to the group goal he must reach with them.

An orchestra conductor's relationships with his musicians may illustrate some requirements of all leadership situations:

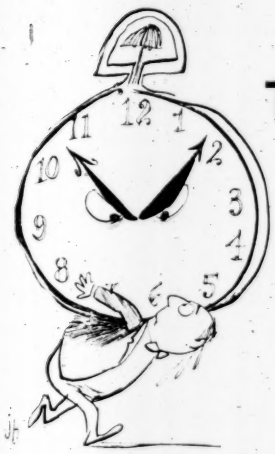
- The men must have the requisite skills and training for their roles. Not all group failures are the boss's fault. Toscanini could not have got great music from untrained men.
- A psychological setting must be established for the common task. Just as the conductor must establish agreement about promptness at rehearsals, talking or smoking on stage between numbers, new music versus old, and a dozen other things that might otherwise come between him and his musicians in their common aim, so every office and factory must have rules or customs that are clearly understood and easily followed.
- Most important of all, the musicians must share satisfaction with their leader in the production of music or of music of a certain quality. Unless they individually achieve a sense of accomplishment, his leadership has failed and he will not make great music. Some distinguished conductors have been tyrants; others have played poker with their musicians. But these distinctions are irrelevant: Personal qualities or mannerisms may serve as reminders, reinforcing the vital image of a man and his standards, but no one ever became a Toscanini just by imitating his mannerisms.

Leadership is more than "understanding people," "being nice to people," or not "pushing other people around." Like an orchestra leader, a manager must use his skills and human insight to produce individual satisfactions in the common enterprise. No collection of tricks nor any amount of showmanship can do that.

• *W. C. H. Prentice*
HARVARD BUSINESS REVIEW
September-October, 1961

YOU CANNOT RUN away from a weakness; you must sometimes fight it out or perish; and if that be so, why not now, and where you stand?

—ROBERT LOUIS STEVENSON



The 70-Minute Hour

A COMMON PROBLEM among managers is getting the maximum mileage from their working time. How can you improve the use of your time? Try a systematic approach.

Logging activities

The first step toward getting the most from your working hours is to pinpoint what you are actually doing with them. Try to keep a log of your activities: what each one is, how much time it takes, why you are involved, and who else is involved. Keep the log for approximately two weeks, or until you have a representative—and realistic—sample of your daily activities.

There will be times, of course, when you will be unable to jot down everything as it happens. Whenever possible, however, be sure to include small items and minor interruptions along with the major activities.

The data you collect may reveal obvious ways to improve the use of your time, but the picture becomes even sharper when you classify your activities. What percentage of your total time do you spend on nonessential tasks because they're easy or because you like to do them? Can you cut these? What percentage is spent on routine or repetitive activities? Can you delegate them, or cut them? What percentage is spent on what you *must* do and on the activities that will pay off in the future?

The main questions to ask in this analysis are: What activities take your time? How many hours are you spending on each classification? Is this the wisest division of your time?

Planning action

If your analysis indicates that you are not spending your time most productively, a new budget for your time is called for. Planning it requires answers to further questions:

- *What activities are most important?* First, you should give comparative ratings to the objectives you want to achieve, the duties you must perform, the activities that contribute the most to your department's success. These are the yardsticks against which all other activities should be measured.

Top priority should go to activities that are essential to the operation; to others that would remain if, arbitrarily, you had to eliminate half of your activities; and to those you must perform yourself.

- *What can you change?* It is usu-

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ally easier to change our habits than it is to change our environment. So, if changes are in order, start with those you can make on your own, without complications, without support or approval necessary from others, and without redesigning yourself or your environment. Can you, for example, rearrange the sequence of your tasks so that you have fewer bits and pieces of unused time and fewer interruptions? On the other hand, do you spend too much concentrated time on a particular project when a change of pace might give you a renewed alertness and productivity?

• *What can others change?* Your associates often can help you make better use of your time—and theirs. For example, your boss may be able to revoke an obsolete regulation that prohibits your delegating a specific task. Your subordinates—as you help them develop their abilities—may be able to assume more of the responsibilities you now carry.

Your final step is putting your time budget into action, with a general, flexible plan for allocating your time. Allow some time for contingencies, and save some, perhaps, for extra attention to matters of special importance. As you put the plan into operation, it's a good idea to compare your actual performance with your budget, in order to check yourself and make continued improvements.

When you find that your plan is working, a final question arises: What do you want to do with the recovered time? Time is as valuable as it is limited, so try to find new uses for "new time."

• *Paul J. Gordon*
BUSINESS HORIZONS
Spring, 1961

Here's What the Arbitrator Said

(See "Youth vs. Age, page 33)

IT WAS UNDERSTANDABLE that management should want to promote a young man to a helper job, but the contract didn't provide for making age alone a criterion of selection. The arbitrator wrote: "I believe that the use of the word 'qualified' means that the bidder must have the competence, skill, and ability to perform the duties required by the job for which he is bidding. To accept the broad definition of 'qualified' advanced by the company, to include age, opens the door to consideration of a host of other factors not directly related to the ability of the bidder to perform the duties of the job."

NOTE: This award does not indicate how other arbitrators might rule in an apparently similar case. Arbitrators do not follow precedents. Each decision is based on the particular history, contract, testimony, and other facts involved.

Mr. Chairman

A MEETING is more than the sum of its members. Members interact; they stimulate and exchange ideas. The key to a productive meeting and to maximum participation of its members is the chairman.

A chairman has many duties: He must listen carefully to what is being said. He must recognize pertinent suggestions and point them up for the group. He should combine similar ideas that are expressed differently, and try to reconcile differing opinions. He should clarify statements that might be misunderstood. He should sum up the discussion at various stages, to mark the group's progress toward a solution or decision.

A successful meeting requires planning. For a problem-solving meeting, as an example, if possible participants should be told the problem ahead of time, so they can organize their thinking on it and assemble necessary facts. If the meeting is to be a general discussion, the chairman should prepare an agenda and arrange the topics in a logical and orderly fashion.

Further planning for both kinds of meetings includes making sure that enough seats are provided, that any necessary visual aids have been prepared and are on hand; that pads and pencils are available; and—most important—that the chairman has all his facts, so he can answer questions and stimulate discussion.

Rules of order

Some chairmen are guided by formal rules of order, but such rules are not always necessary, particularly for a small meeting. A chairman with tact and common sense may never need formal procedures.

If a chairman uses formal rules, however, he should apply them carefully. He should avoid becoming dictatorial; a gentle nudge is usually all that is required to keep a meeting moving in the proper direction. If he must invoke a rule, he should avoid saying merely, "It's in the book." It's better to explain why the rule is being applied in a particular situation.

Courtesy

A chairman's most effective tool in conducting a meeting is courtesy; without it no set of rules will keep him on target. Courtesy and tact are especially important in securing everyone's

participation. The chairman's job is to get the ideas of others into the open, so he should listen to every statement and show some enthusiasm in his comments. A chairman's interest in a discussion can be infectious. But, by the same token, he can silence the most eager speaker by appearing to pass judgment on the speaker's words, by talking with someone else, or by appearing bored.

Courtesy, of course, isn't the exclusive province of the chairman. A participant may become so excited that he forgets that others have not spoken, but the chairman should see that everyone has a chance to contribute to the discussion. Ideally, he should not allow one person to speak twice until all the others have had their turn. As an example, he can handle a would-be monopolizer by suggesting: "While we're on this point, let's hear some other ideas on it."

In even the most considerate group a chairman is likely to be faced with conflicts between members. Often, however, a conflict may be the result of a misunderstanding. When two people disagree, the chairman should state, in a few words, what he believes to be the positions of the two disputants. He should be sure that everyone is talking about the same fact, event, person, or proposal. Conflict and confusion often fade away when the chairman clarifies key words or concepts.

Discussion revivers

Occasionally a discussion will lag. When this happens, a chairman can try asking a question that is allied to the topic but a few steps ahead of the current discussion. For example, he can ask, "What will happen if we decide this way?" A new approach to the basic question may lead to a satisfactory answer.

A discussion may also lag if a speaker gets off the subject. Digression wastes time and usually clouds the issue. One way the chairman can get the discussion back on the track is by summarizing what has been said up to that point.

No set of rules will teach a chairman how to conduct a successful meeting. His main guides will be his own common sense, his courtesy to the participants, and his respect for each person's contribution.

• MONTHLY LETTER
The Royal Bank of Canada
August, 1961

Balancing Risks and Returns

NO DECISION is worth the name unless it involves the balancing of risks and returns. If it were a sure thing, we would not need a man to use his judgment about it. Mistakes are inevitable. What we must expect of employees is that they learn from their mistakes, not that they never make them. It should be the manager's concern to watch the long-term growth of his subordinates to see that, as they learn, their successes increasingly outweigh their failures.

—W.C.H. Prentice in
"Understanding Leadership,"
Harvard Business Review

Treat Electricity with Respect

MANY JOBS once done manually are now being performed with the help of electrical machinery. Although safety devices are commonly built into such machinery, accidents still can occur. Here are some guides for eliminating electrical hazards:

Almost any voltage—even as low as a six-volt battery—can cause a shock. Low-voltage shocks are seldom fatal, but they can produce dangerous corollaries. One is "jerk-back": A person may step back into the path of a moving truck, or lose his balance on a ladder, or rip his flesh on a tool as he pulls back his arm.

Three precautions will prevent electrical shocks: properly grounding machinery; completely guarding live metal; and interlocking all access doors, gates, and panels.

- *Grounding.* Many machines have pipes or other metal connections that ground them. But a pipe may be discontinued somewhere, or part of a connection may be temporarily removed for repair. All electrical machinery should be *completely* and *permanently* grounded. Portable tools or plug-in devices should be fitted with an extra wire for grounding them during use.
- *Guards.* All metal parts connected to live circuits must be covered or guarded so that users cannot touch them. If this is not feasible, live parts should be painted yellow and clearly labeled as being live.
- *Interlocked doors.* Live machine parts are dangerous even when the machine is turned off. If employees must have access to such parts—if, for example, maintenance personnel must service the machinery—the access doors and gates should be fitted with switches that automatically disconnect the central generator when the doors are opened.

When a motor is overloaded, when a transformer is short-circuited, or when too many appliances are connected to one pair of wires, the wires may overheat; surrounding insulation may burn and ignite nearby flammable material such as oils, waxes, or paint rags.

Fire can also be caused by arcs or sparks resulting from high voltage jumping between pieces of metal that are too close together. Again, if flammable material is nearby, serious fires may result.

Explosions

The atmosphere surrounding electrical equipment is a possible source of danger. Explosive gases, fumes, or vapors may be ignited by a spark from loose wire connections, frayed strands of wire, loose fuse clips, or even the normal operation of switches, relays, and plugs. One safeguard is using explosion-proof components approved by the Underwriters' Laboratory; another is moving as much electrical equipment as possible from potentially explosive atmosphere.

There are other, less dramatic but equally serious dangers where electrical machinery is used. Burns, for in-

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stance, are often caused by hot reflectors on bench lamps. Inexpensive shades that stay cool enough to prevent flesh burns are available.

Cuts, scratches, or even deeper wounds may be made by sharp edges when a worker makes adjustments, repairs, or replacements inside electrical-control cabinets. Many cabinets are not sufficiently burred on the inside, and an examination may indicate the need for a warning sign posted on its cover.

Electrical equipment is sometimes responsible for more insidious injuries, too. For example, internal-combustion engines used to supply emergency power may release lethal carbon monoxide gas. Engines should be properly ventilated or installed in areas where fumes will not be harmful.

And eye injuries can result not only from sparks themselves but also from ultraviolet light from high-intensity sparks. Employees working with live circuits should wear protective glasses.

Despite all precautions, accidents may still occur, and it may be necessary to shut off electrical equipment quickly. For that reason, all such equipment should be controlled by one main switch whenever possible. The switch should be painted with a brilliant red sign reading, "Main Switch"; everyone should know its location.

Finally, for emergency treatment in cases of electrical shock, a supervisor should know how to give artificial respiration.

• *David Bagdan*
SAFETY MAINTENANCE
August, 1961

STATEMENT required by the Act of August 24, 1912, as amended by the Acts of March 3, 1933, July 2, 1946 and June 11, 1960 (74 Stat. 208) showing the ownership, management, and circulation of SUPERVISORY MANAGEMENT, published monthly at Concord, N. H., for October 1, 1961.

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HARWOOD F. MERRILL, EDITORIAL DIRECTOR

Sworn to and subscribed before me this 26th day of September, 1961.

ROSE M. BARILE, Notary Public. (My commission expires March 30, 1962.)

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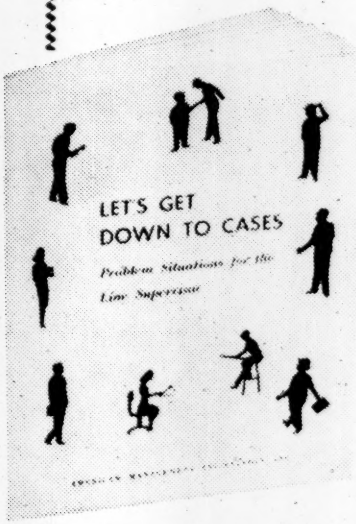

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